

## WHAT IS CLAIMED

1. A jet burner for gaseous fuels with a gas supply and a burner surface permeable for said fuel and on which said fuel burns, WHEREIN said burner surface (1) is constructed heterogeneously and comprises at least two different surface areas, wherein one or several first surface areas (3) are permeable for said fuel, whereas one or several second surface areas (2) are impermeable for said fuel.
2. The jet burner as defined in claim 1, WHEREIN a plurality of first surface areas (3) are imbedded in a second surface area (2).
3. The jet burner as defined in claim 1 or 2, WHEREIN said surface portion of said first surface areas (3) in relation to said surface portion of said second surface areas (2) is chosen such that said jet burner has a given output.
4. The jet burner as defined in one of the preceding claims, WHEREIN said jet burner with a round burner surface (1) with a diameter of 50 to 300 mm, 80 to 200 mm in particular, preferably 120 mm, has a nominal output of 0,5 to 10 kW, preferably 1 to 5 kW, 1 to 3 kW in particular.
5. The jet burner as defined in one of the preceding claims, WHEREIN said first surface areas (3) are formed of metal fiber mats, punched ceramics or foam ceramics.

6. The jet burner as defined in one of the preceding claims,  
WHEREIN said second burner areas (2) are formed of metal,  
heat-resistant steels or alloys in particular, or ceramics.
7. The jet burner as defined in one of the preceding claims,  
WHEREIN said burner surface (1) is formed of nests (3) of foam  
ceramics (first surface areas) received in a massive ceramic  
plate (2) (second surface area) by gluing of said nets into open-  
ings of said ceramic plate or integral formation of said foam ce-  
ramics with said massive ceramic plate, in particular.
8. The jet burner as defined in one of the preceding claims,  
WHEREIN said first surface areas (3) have different sizes and/or  
shapes.
9. The jet burner as defined in one of the preceding claims,  
WHEREIN said first surface areas (3) are formed such and/or are  
distributed in said burner surface that uniform heating is guar-  
anteed over the surface heated by said burner.
10. A method for manufacturing a jet burner for gaseous fuels, as  
defined in one of the preceding claims in particular,  
WHEREIN  
a first heat-resistant material permeable for the fuel after com-  
pletion is selected,  
a second heat-resistant material after completion impermeable  
for the fuel, is selected, which can be connected with said first  
material,  
from said second material a preferably planar form is manufac-  
tured in which particularly uniformly distributed a multitude of

openings small with respect to the entire surface of the preferably planar form is provided for, wherein from said first material preferably planar forms complementary to said openings are formed, which are mounted in said openings so that a burner surface is created.

11. The method as defined in claim 8,

WHEREIN as first material a foamed plastic soaked with liquid ceramic mass, polyurethane in particular, and as second material a condensed ceramic mass is chosen, wherein after insertion of said first material into the openings of said second material the thus created compound is burned so that of said first material porous foam ceramics is created integrally incorporated into a massive ceramic plate.

12. A method for manufacturing a jet burner for gaseous fuels, as defined in one of the claims 1 to 9,

WHEREIN from a heat-resistant material permeable for the fuel a planar form is manufactured which is sealed in given regions, in a matrix region in particular, which surrounds a plurality of in particular uniformly distributed regions small in relation to the entire surface of said planar form so that a burner surface is created comprising one or several first surface areas (3) permeable for the fuel as well as one or several second surface areas (2), a matrix region in particular, which due to sealing are impermeable for the fuel.